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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,499	12/12/2001	David Akopian	944-001.056	4552
4955	7590	03/16/2005		
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER PERILLA, JASON M	
			ART UNIT 2634	PAPER NUMBER

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**Application No. **UK**

10/016,499

Applicant(s)

AKOPIAN, DAVID

Examiner

Jason M Perilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/25/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-12 are pending in the instant application.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on March 25, 2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Claim Objections***

3. Claims 1-12 are objected to because of the following informalities:

Regarding claim 1, in line 1, "the carrier" should be replaced by –a carrier--, in line 3, "a carrier" should be replaced by –the carrier--, in line 8, "the approximately" should be replaced by –the successive approximately--, in line 9, "with a replica of" should be replaced by –with phase shifted replicas of--, in lines 10-11, "the set is formed" should be replaced by –the successive approximately carrier-demodulated received signals are formed--, in line 12, "used" should be stricken, and, in lines 12-13, "the received signal fragment" should be replaced by –successive received signal fragments--.

Regarding claim 2, in line 5, "indicating code phase" should be replaced by –indicating a replica code phase--.

Regarding claim 3, in line 3, "of signal" should be replaced by –of received signal--, and, in line 5, "which the phasor" should be replaced by –which phasor--.

Regarding claim 6, in line 1, "the carrier" should be replaced by –a carrier--, in line 3, "a carrier" should be replaced by –the carrier--, in line 8, "the approximately"

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should be replaced by --the successive approximately--, in line 9, "with a replica of" should be replaced by --with phase shifted replicas of--, in line 10, "the set is formed" should be replaced by --the successive approximately carrier-demodulated received signals are formed--, in line 12, "used" should be stricken, and, in lines 12-13, "the received signal fragment" should be replaced by --successive received signal fragments--.

Regarding claim 7, in line 5, "indicating code phase" should be replaced by --indicating a replica code phase--.

Regarding claim 8, in line 3, "of signal" should be replaced by --of received signal--, in line 4, "of signal" should be replaced by --of received signal--, and, in line 6, "which the phasor" should be replaced by --which phasor--.

Regarding claim 9, in line 4, "a first signal" should be replaced by --a first received signal--, in line 5, "preceding signal" should be replaced by --preceding received signal--.

Regarding claim 11, in line 6, "to approximately" should be replaced by --to successive approximately--, in line 9, "the approximately" should be replaced by --the successive approximately--, in line 10, "with a replica of" should be replaced by --with phase shifted replicas of--, in line 11, "the set is formed" should be replaced by --the successive approximately carrier-demodulated received signals are formed--, and, in lines 13-14, "the received signal fragment" should be replaced by --successive received signal fragments--.

Regarding claim 12, in line 3, "computing facility via" should be replaced by – computing resource via--, in line 4, "computing facility" should be replaced by – computing resource--, in line 6, "to select the phasor" should be replaced by –to determine the selected--.

Appropriate correction is required.

### ***Allowable Subject Matter***

4. The indication of allowable subject matter is made regarding claims 1-12.
5. The following is a statement of reasons for the indication of allowable subject matter:

The indication of allowable subject matter is made regarding claims 1-12 because the prior art of record does not disclose the creation of a matrix of frequency/code phase pairs and the selection of a maximum correlation value in the matrix for frequency and code phase acquisition in a GPS receiver. The particular sequence of frequency and code phase acquisition detailed in the instant application according to figure 1 wherein signal fragments are downconverted over a plurality of possible frequency offsets and, respectively, over each code phase offset for each frequency offset and storing the results into a matrix is not shown in the prior art of record.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 4841544 to Nuytkens.

U.S. Pat. No. 6111911 to Sanderford et al.

U.S. Pub. No. 2002/0064210 to Sullivan.

U.S. Pub. No. 2002/0123352 to Vayanos et al.

U.S. Pub. No. 2002/0058927 to Becker et al.

U.S. Pat. No. 6289041 to Krasner.

U.S. Pat. No. 6577271 to Gronemeyer.

U.S. Pat. No. 6577674 to Ko et al.

7. This application is in condition for allowance except for the following formal matters:

The objections set forth above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

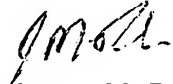
A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

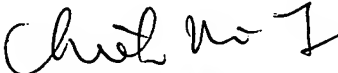
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jason M. Perilla  
March 10, 2005

jmp

  
CHIEH M. FAN  
PRIMARY EXAMINER